Testimony to Senate Energy and Technology Committee

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MI Energy
Michigan Agency for Energy

Michigan's Energy Successes Need to Continue

- We solved a major reliability crisis that quickly became a major competitiveness crisis
- Our environmental impact from our electric sector has been declining, and is much lower than other states in our EIA region
- We did this while becoming more economically competitive
- Michigan must continue to improve, adapt

Michigan's Competitiveness

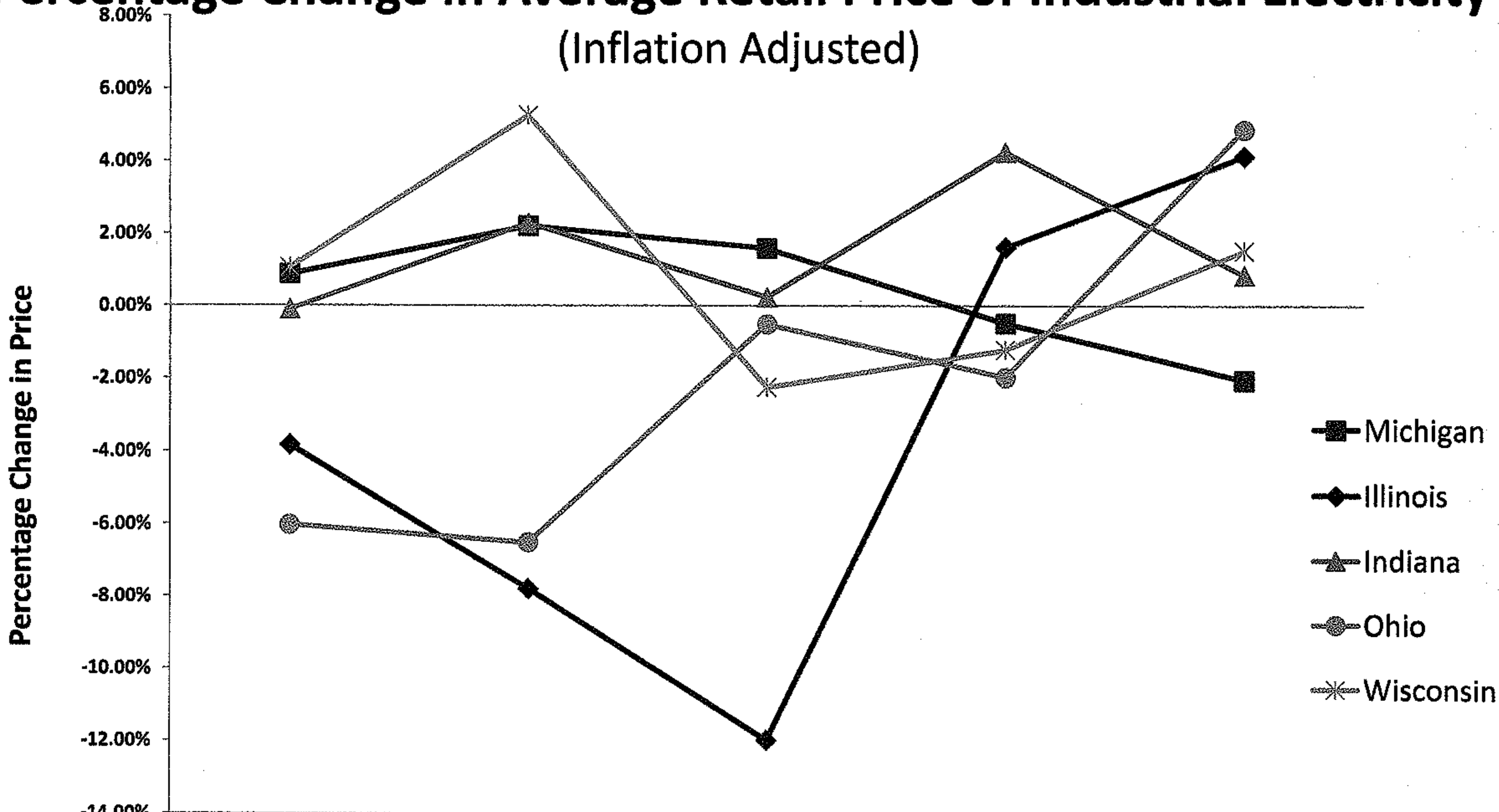
Average Price of Electricity for Industrial Customers (cents/kWh)

	June 2014	June 2015	Percent Change
Michigan	8.02	7.39	- 7.9 %
Illinois	6.35	6.11	- 3.8 %
Indiana	6.89	6.70	- 2.8 %
Ohio	6.76	7.14	+ 5.6 %
Wisconsin	7.94	8.25	+ 3.9 %

Source: EIA data

Percentage Change in Average Retail Price of Industrial Electricity

(Inflation Adjusted)



	2010	2011	2012	2013	2014
Michigan	0.87%	2.21%	1.59%	-0.49%	-2.05%
Illinois	-3.83%	-7.77%	-11.94%	1.62%	4.12%
Indiana	-0.11%	2.29%	0.23%	4.23%	0.84%
Ohio	-6.02%	-6.50%	-0.51%	-1.97%	4.85%
Wisconsin	1.05%	5.25%	-2.24%	-1.21%	1.52%

Source: EIA data, MAE analysis

We Are At a Crossroads

- We can continue to make our own decisions, being ready to adapt to what lies ahead, or we can allow the federal government to step in and dictate our energy future.
- To protect Michigan’s jurisdiction and our ratepayers and citizens, we need:
  - The ability to craft our own reliability solutions
  - Better, more adaptable decision making
  - Continued focus executing no-regrets options
- If we don’t choose our path soon, the feds will choose it for us.

MI Utility Coal Plant Retirements

Utility	Plant	Location	Number of Units	Nameplate Capacity (MW)	Retirement Date
DTE Electric	Harbor Beach	Harbor Beach (Huron Co.)	1	121	2013
DTE Electric	Trenton Channel	Trenton (Wayne Co.)	2	240	2016
Consumers Energy	BC Cobb	Muskegon (Muskegon Co.)	2	312	2016
Consumers Energy	JC Weadock	Essexville (Bay Co.)	2	312	2016
Consumers Energy	JR Whiting	Erie (Monroe Co.)	3	345	2016
Michigan South Central Power Agency	Endicott	Litchfield (Hillsdale Co.)	1	55	2016
Holland Board of Public Works	DeYoung	Holland (Ottawa Co.)	3	63	~2017
Lansing Board of Water and Light	Eckert	Lansing (Ingham Co.)	6	335	~2018
Wisconsin Electric	Presque Isle	Marquette (Marquette Co.)	5	450	2020
Source: MPSC Staff		**Total:**	**25 units 2233 MW**		

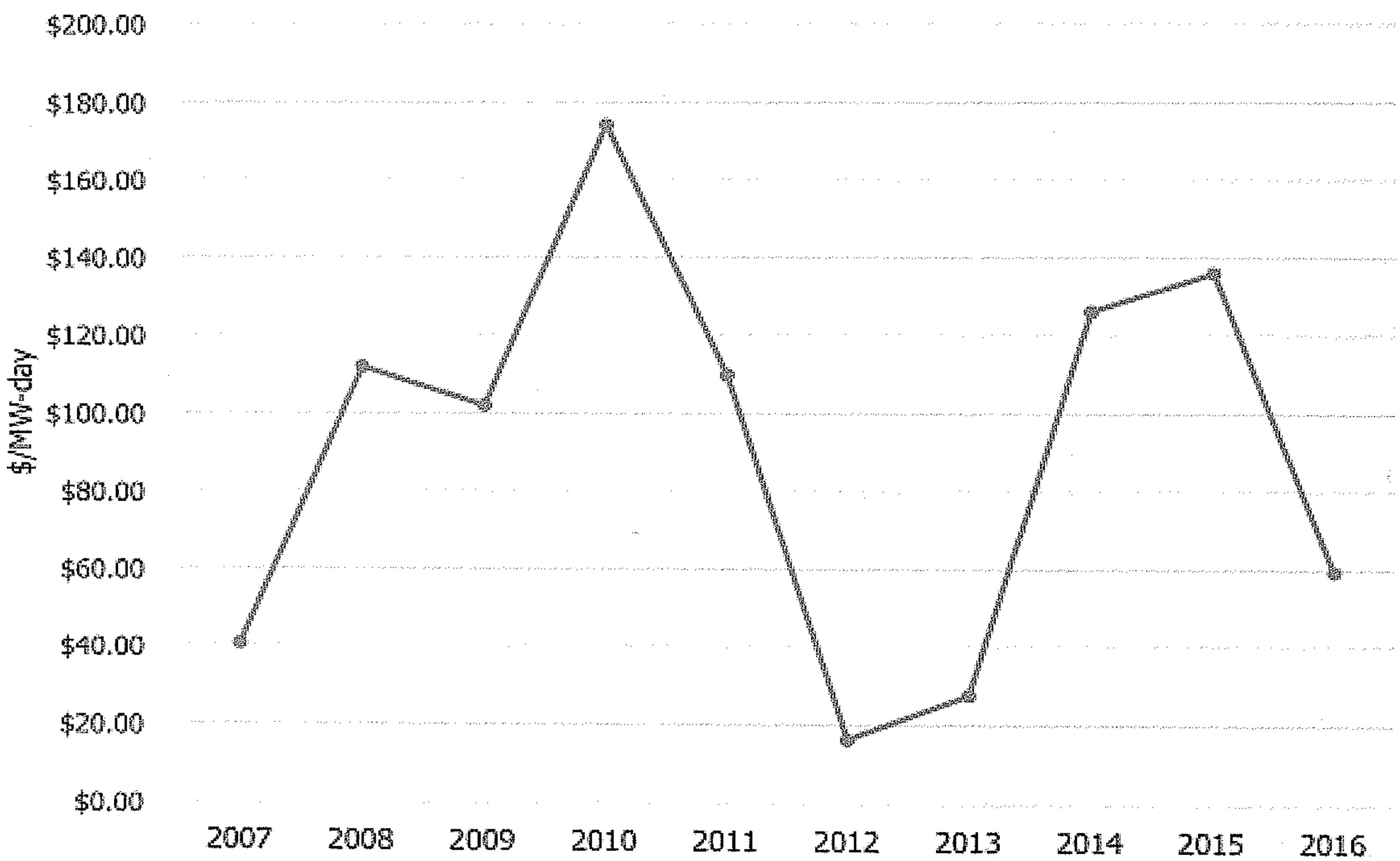
Our Reliability: MPSC Findings

- MPSC does not expect a large-scale outage due to lack of supply between now and 2020.
- We will be purchasing on the market to prevent that, at the auction price.
- If those prices spike (e.g. if a contraction of supply drives prices up), costs can go up dramatically in a very short time period for all Michigan consumers.

UP: A Taste of the Future?

- When you have “must run” plants and no plan in place to respond to reliability need, we lose jurisdiction over:
  - Costs ratepayers pay for operating those plants
  - Which ratepayers will pay
  - What alternative, at what cost, and who will pay for that
- Reclaiming jurisdiction from feds extremely hard
- Even with guaranteed payments for must-run facilities, large plants need a long-term customer base for financing

PJM Capacity Auction Clearing Prices



Source: PJM Interconnection, LLC

PIPP: Lessons Learned

- We need to know where we are getting our capacity, and ensure support from all customers for it – to protect all energy consumers from unexpected rate hikes
- We need better planning that looks at the whole portfolio and whole range of solutions
- We need to get in front of the feds – be they MISO, FERC, or the EPA

Better Decision-Making Builds on Michigan's Successes

- Certificate of Need with Integrated Resource Planning
  - Have seen it both allow a utility to make large investments in capacity and cause a utility to opt for not building itself
  - Offers pre-approval of costs, but puts projects to a much more stringent test than other investments (**most** reasonable and prudent)

CON/IRP proposal

- Goal: approve a portfolio that is the **most** reasonable and prudent alternative, which is cost-effective, complies with applicable reliability standards and environmental regulations, and maximizes adaptability.
- Look at things holistically, be able to "roll up" the plans to ensure compliance
- Avoid conflicting mandates
- Offer an off-ramp if the world changes

A Successful CON/IRP

- Must weigh both capital (a new gas plant or wind farm) and non-capital alternatives (waste reduction, demand response), and ensure economic incentives for best alternatives are similar to those for less good alternatives
- Must have a financial reward for higher test
- Must allow alternatives to come in and “make their case”

Why This Is Improvement

- Adaptability Increased
  - Better comparisons. Higher standards. Off-ramps. Better information.
- Affordability Increased
  - Higher standards. More options compared, open process. Finds best way to meet multiple goals.
- Reliability Increased
  - Requires more planning, allows region-wide approach
- Environmental Protection Increased
  - No artificial limits or lack of compensation for no emission resources (e.g. peak shaving, waste)

Why An Improvement Over Current Law

- Puts all investments on equal footing
  - No barrier to putting renewable energy to same test (CON standard now does not allow that)
  - Gets rid of $500M threshold so smaller plants/investments with big cumulative totals get put to same test as one investment does
  - Not limited to new plants, investments, or long PPAs; allows similar benefits to accrue to alternatives

Why An Improvement Over Current Law

- Much tougher standard for all investments (“**most** reasonable and prudent” instead of “just and reasonable”)
- Wider potential for pre-approvals should lower financing costs (lower risk)
- More adaptable with an off-ramp for changing conditions

Why An Improvement Over Current Law

- Limitations of current energy waste law
  - Cap on amount that can be spent is 2% of total retail sales, even if alternatives cost much more
    - Independent study predicted this will limit electric waste reduction to 0.6%- 0.7%/yr by 2025.
  - Limits on compensation make it non-preferred even when cost-effective
    - Electric decoupling not authorized
    - Limit on amount of peak shaving that can be compensated (10% of waste reduction)
    - No pre-approval via CON

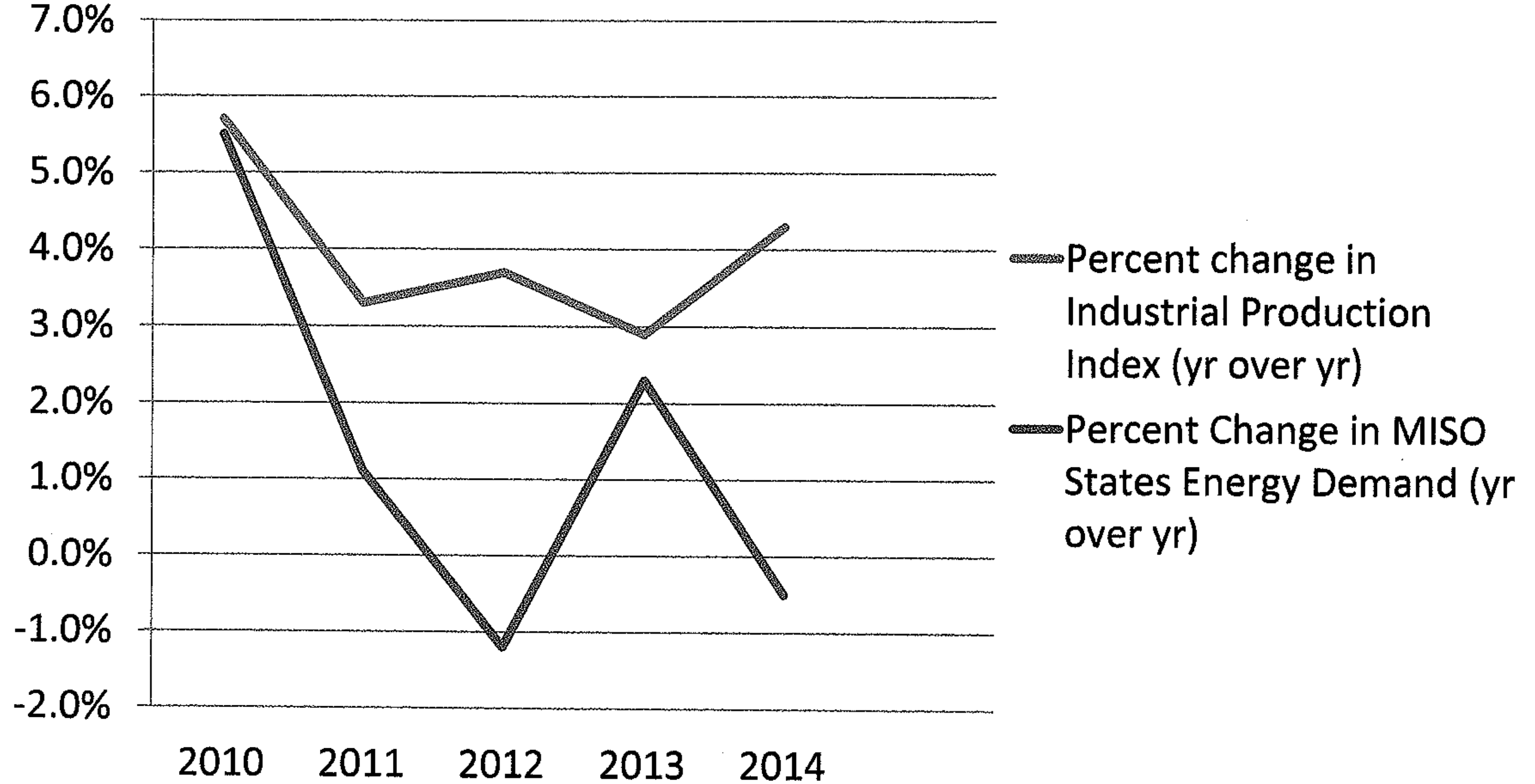
What We Expect to See: No-Regrets Alternatives Win

- Example: Energy Waste Reduction
  - Lifecycle savings to MI ratepayers due to Energy Optimization Programs equal $4.2 billion since 2009. (Total fuel cost for the state over that time period was approximately $24 billion.)
  - It is cheaper to help buy your neighbor's insulation than Wyoming's coal.
  - Michigan schools save $12.2 million annually – a figure that rises if energy prices rise
  - Michigan colleges and universities save $6.4 million annually.

It Does Work

- We do NOT pay our utilities without demonstrated success
- We have shown, with Michigan-specific data and statistical work, that these programs save Michiganders real money.

Economic Growth No Longer Dictates Energy Demand Growth



Source: MISO Independent Load Forecast, November 2014